

# **RESIDENTIAL WIRING**

ELPT 1429

#### INSTRUCTOR: Norman Witcher

COURSE NUMBER: ELPT 1429

CREDIT HOURS: 4 (3/3)

### PREREQUISITE: NONE

<u>CATALOGUE DESCRIPTION</u>: Wiring methods for single family and multi-family dwellings. Includes load calculations, service entrance sizing, proper grounding techniques, and associated safety procedures.

TEXTBOOK: Residential Wiring

- SUPPLIES: 1. Calculator
  - 2. Digital VOM meter
  - 3. Other

<u>LEARNING OUTCOMES</u>: Compute the circuit sizes needed for the installation of branch circuits, feeders, and service entrance conductors; explain the proper installation of wiring devices according to electrical codes; demonstrate grounding methods; install ground fault circuits; identify residential wiring methods; and demonstrate proper safety procedures.

#### COURSE REQUIREMENTS:

- Complete all scheduled homework
- Complete all scheduled labs
- Complete written\lab tests
- Complete a written\lab final test

#### **METHODS OF EVALUATION:**

GRADING SCALE		WEIGHT OF COURSE I	WEIGHT OF COURSE REQUIREMENTS	
POINTS	GRADE	AREA	GRADE WEIGH	
90-100	А	LAB ASSIGNMENTS	25%	
80-89	В	TESTS	25%	
70-79	С	FINAL TEST	25%	
65-69	D	PROFESSIONALISM	25%	
0-64	F	TOTAL	100%	

#### ATTENDANCE POLICY\PROFESSIONALISM POLICY

Attendance is the greatest predictor of your success. Your attendance at EVERY ONE of the classes and labs is important and expected. A substantial grade penalty will be assessed to late work; including homework, lab assignments, and test. The "Professionalism Grade" will be determined by such factors as attendance, tardiness, class participation, and other classroom factors.

# RESIDENTIAL WIRING SYLLABUS CHART

ITEM	ТҮРЕ	DESCRIPTION	DUE
1	Discussion\Quiz\Lab	SAFETY	TBA
2	Discussion\Quiz\Lab	NATIONAL ELEC CODE	TBA
3	Discussion\Quiz\Lab	ELECTRICAL SERVICES	TBA
4	Discussion\Quiz\Lab	ELECTRICAL PANELS	TBA
5		TEST 1	
6	Discussion\Quiz\Lab	BLUEPRINTS	TBA
7	Discussion\Quiz\Lab	CIRCUIT BREAKERS	TBA
8	Discussion\Quiz\Lab	ARC FAULT CIRCUITS	TBA
9	Discussion\Quiz\Lab	CIRCUIT DESIGN	TBA
10	Discussion\Quiz\Lab	CIRCUIT LAYOUT	TBA
11	Discussion\Quiz\Lab	ELECTRICAL BOXES	TBA
12	Discussion\Quiz\Lab	CONDUCTOR SIZING	TBA
13		TEST 2	
14	Discussion\Quiz\Lab	SWITCHES	TBA
15	Discussion\Quiz\Lab	LIGHTING SYSTEMS	TBA
16	Discussion\Quiz\Lab	CONDUIT SIZING	TBA
17	Discussion\Quiz\Lab	BRANCH CIRCUITS	TBA
18	Discussion\Quiz\Lab	OVERCURRENT PROTECTION	TBA
19	Discussion\Quiz\Lab	ENERGY CONSERVATION	TBA
20	Discussion\Quiz\Lab	POWER SYSTEMS	TBA
21	Discussion\Quiz\Lab	ELECTRICAL THEORY	TBA
22	Discussion\Quiz\Lab	LOAD CALCULATIONS	TBA
23		FINAL LAB\TEST	

## **Expectations for Engagement – Face to Face Learning**

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

- 1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
  - provided my contact information at the beginning of the syllabus;
  - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,

- notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
- 2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
  - provide clear information about grading policies and assignment requirements in the course syllabus, and
  - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
- 3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
  - return classroom activities and homework within one week of the due date and
  - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

- 1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
  - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
  - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
  - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
- 2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
  - missing class when a major test is planned or a major assignment is due;
  - having trouble submitting assignments;
  - dealing with a traumatic personal event; and,
  - having my work or childcare schedule changed so that my classroom attendance is affected.
- 3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
  - seek out help from my instructor and/or from tutors;
  - ask questions if I don't understand; and,
  - attend class regularly to keep up with assignments and announcements.

## **Special Needs**

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Learning Resource Center (Library)

The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian" service provide additional help.

## **Student E-mail**

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. All assignments or correspondence will be submitted using your Odessa College email.

## **Student Portal**

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. All assignments or correspondence will be submitted using your Odessa College email.

## **Technical Support**

For Blackboard username and password help and for help accessing your online course availability abd student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk\_form.htm.

### **Important School Policies**

For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the Odessa College Student Handbook.